HOLDEN MINE REMEDIATION PROJECT

Construction Report

Over 160 contractors and construction workers are currently working in the Railroad Creek valley and Holden area. These crews are actively working on the underground mine portals, the Railroad Creek realignment, grading of Tailings Pile 1, barrier wall investigation drilling, borrow area development and the completion of a temporary maintenance shop for Holden Village.



Clearing for Railroad Creek realignment

Current Construction Activities:

Mine Portals: To regulate water draining from the underground mine portals, crews are working on constructing concrete bulkheads in those portals. Shotcrete has been completed in the Main Portal and crews moved to the Ventilator Portal for bulkhead pour.

Railroad Creek Realignment: A section of the Railroad Creek channel is being re-located to allow for future construction of a barrier wall at the base of the tailings piles. The Railroad Creek realignment route has been cleared of slash and timber creating a new pathway for the creek. Crews are installing a complex system of dewatering wells along each side of the realignment path. These wells will drain and divert groundwater from the area surrounding the creek realignment to allow stream construction to occur in a dry environment and in a safe and accessible manner.

Tailings Pile Grading: Crews have completed the first stage of grading Tailings Pile 1. Access material was moved to Tailings Pile 3 to allow for the barrier wall platform construction and investigation drilling.

Barrier Wall: The barrier wall platform has been completed along Tailings Pile 1. A series of exploratory drilling efforts along the barrier wall platform were done to investigate the glacial till and bedrock depth for the below grade barrier wall design.



A super sack wall (very large bags filled with sand) is being placed in Railroad Creek to divert water away from the tailings pile and allow for installation of riprap rock to protect the base of the tailings piles in preparation for the barrier wall construction. The barrier wall platform will extend to the western half of Tailing Pile 2 once the creek has been relocated.

Borrow areas: Material from South Tailings Pile 3 borrow area is being excavated and screened to produce material in the Railroad Creek realignment. Blasting has begun on the East Ten Mile Quarry to develop the quarry. Rock and fill material blasted or excavated is removed from the Quarry and hauled to Lower West Ten Mile Borrow area for processing or staged as riprap material for the creek realignment. The crusher/screening plant is used to produce wearing course and other specified rock products. Dan's Camp borrow area has been a very productive material site for sand for the super sacks and river rock that will be used in the new creek bed.

Temporary Maintenance Shop: A temporary structure has been erected to serve as a location for Holden Village maintenance needs during the remediation, as the current maintenance shop will be dismantled.



Drilling set up for RR Creek realignment dewatering



Barrier wall platform



Grading of Tailings Pile One